

ATLANTA, GA 30339-5948

## United States Patent and Trademark Office

50

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 08/09/2001 081607-1150 5372 09/925,786 James Davis 24504 7590 04/12/2005 **EXAMINER** THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP EL HADY, NABIL M 100 GALLERIA PARKWAY, NW ART UNIT PAPER NUMBER STE 1750

2154

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/925,786	DAVIS ET AL.
	Examiner	Art Unit
	Nabil M El-Hady	2154
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 18 January 2005.		
2a) This action is FINAL. 2b) ⊠ This	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
<ul> <li>4) ☐ Claim(s) 1-27 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-27 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>		
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)	_	
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date</li> </ol>		Patent Application (PTO-152)

Art Unit: 2154

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/18/2005 has been entered.

- 1. Claims 1-27 are pending in this application.
- 2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-27 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-29 of copending Application No. 09/925,269. This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, namely, a system for controlling communication and/or for remote data collection between/from a host computer connected to a first communication network and a plurality of

Art Unit: 2154

communication devices that define a second communication network associated with a plurality of remote devices that are to be monitored and controlled by the host computer, All the limitations of claims 1-27 in the instant application can be either derived or obvious from the limitation in the claims of the copending application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "communication path for a second communication device comprising a first communication device", does not reasonably provide enablement for "a site controller comprising a first communication device of the plurality of communication devices adapted to communicate with a second communication device of the plurality of communication devices". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to include communication devices into the site controller.
- 6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2154

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-4, 6, 8, 10-12, 15-17, and 20-25, are rejected under 35 U.S.C. 102(e) as being anticipated by Cunningham et al. (US 6,124,806), hereafter "Cunningham" and/or rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Canada et al. (US 5,907,491), hereafter "Canada".
- 9. Cunningham and Canada are cited by the examiner in a previous office action.
- 10. As to claims 1 and 23, Cunningham discloses the invention as claimed including a site controller (DCM 112, Fig. 1) adapted to be used in an automated monitoring system configured for monitoring and controlling a plurality of remote devices (SIM 102, Fig. 1) via a host computer connected to a first communication network (CN 118, Fig. 1), the site controller configured for controlling communication with the host computer (HM 120, Fig. 1) and a plurality of communication devices that define a second communication network associated with the plurality of remote devices (108, Fig. 1) (col. 4, lines 47-67), the site controller comprising: a transceiver configured to communicate with the plurality of communication devices via the

Art Unit: 2154

second communication network (2008, Fig. 25; and inherent in col. 4, lines 56-60; and col. 6, lines 11-18; 45-49); a network interface device configured to communicate with the host computer via the first communication network (inherent in col. 4, lines 60-62; and col. 7, lines 19-24); logic configured to: manage communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36), via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on one or more communication paths for each of the plurality of communication devices, each communication path comprising one or more communication devices involved in the communication link between the transceiver and each of the plurality of communication devices (col. 6, lines 20-31; and 108, Fig. 1); and manage communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

- 11. Cunningham discloses a first communication device of the plurality of communication devices adapted to communicate with a second communication device of the plurality of communication devices, and the communication path for the second communication device comprising the first communication device (Master Telemetry Network Repeater 6330; Telemetry Network Repeater 6328; Telemetry gateway 6326, Telemetry Interface Modules 6318, 6320, and 6324, Fig. 49).
- 12. Canada also discloses a first communication device of the plurality of communication devices adapted to communicate with a second communication device of the plurality of communication devices, and the communication path for the second communication device comprising the first communication device (Machine Monitors and Repeaters of Fig. 1, where the controller 6 "Command Station" is communicating to machine monitors directly, through a

Art Unit: 2154

repeater, or through two repeaters). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham and Canada because Canada's use of devices adapted to communicate with other devices would assist in propagating the wireless transmission throughout Cunningham 's system specially when site conditions make such aid necessity (e.g. Canada, col. 4, lines 54-67).

13. As to claim 15, the claim is rejected for the same reasons as claims 1 and 23 above. In addition, Cunningham discloses a method for controlling communication with a host computer (Host Module HM 122, Fig 1) connected to a first communication network (Communication network CN 118, Fig. 1) and a plurality of communication devices (Sensor Interface Module SIM 102, Fig. 1) that define a second communication network (hardwire or Wireless transmission 108, Fig. 1) associated with a plurality of remote devices (inherent) that are to be monitored and controlled by the host computer (Host Module HM 122, Fig.1), the method comprising the steps of determining a unique address for each of the plurality of communication devices by receiving an initialization message (inherent in col. 13, lines 54-56; col. 14, lines 12-20; and col. 15, lines 4-12), determining with which of the plurality of communications devices that each of the plurality of communication devices has a communication link (inherent in col. 6, lines 20-50); based on the plurality of unique addresses and which of the plurality of communications devices each of the plurality of communication devices has a communication link with, determining one or more communication paths associated with each of the plurality of communication devices (inherent in col. 6, line 51 to col. 7, line 17; and col. 16, lines 20-35); managing communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36), via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on or more of the communication paths associated with each of the plurality

Art Unit: 2154

of communication devices (col. 6, lines 20-31; and 108, Fig. 1); and managing communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

- 14. As to claim 2, Cunningham discloses the logic as software and discloses a micro controller for implementing the logic (col. 22, lines 7-8).
- 15. As to claims 3, 16, and 24, Cunningham discloses each of the plurality of communication devices are wireless communication devices (col. 6, lines 11-13), the plurality of wireless communication devices being disposed throughout a geographic area such that the antenna patterns associated with the plurality of wireless communication device overlap to create a coverage area that defines the second communication network (inherent in col. 6, lines 11-19; col. 7, lines 32-44; and col. 14, lines 1-11).
- 16. As to claims 4, 17, and 25, Cunningham discloses the first communication network as a wide area network (col. 32, lines 41-45; and col. 45, lines 60-67) and the second communication protocol comprises TCP/IP (col. 34, lines 58-65).
- 17. As to claim 6, Cunningham discloses the network interface device is selected from the group consisting of a dial-up modem, an ISDN card, a DSL modem, and a LAN card (inherent in col.32, lines 41-45).
- 18. As to claim 8, Cunningham discloses one or more look-up tables residing in a memory (col. 31, lines 6-17).

Art Unit: 2154

- 19. As to claims 10, 11, and 21, Cunningham discloses the logic is configured to receive a first message generated by one of the plurality of communication devices via the second communication network, the first message comprising a first communication device identifier associated with the one of the plurality of communication devices associated with one of the plurality of remote devices that generated the first message (col. 13, lines 54-56) and a predetermined function code corresponding to a data signal provided by the one of the plurality of remote devices associated with the one of the plurality of wireless communication devices that generated the message (inherent in col. 14, lines 20-24), the logic is configured to determine, based on the first communication device identifier, the one of the wireless communication devices that generated the first data signal (inherent in col. 14, lines 18-20).
- 20. As to claim 12, Cunningham discloses the logic is configured to translate the first message into a second message configured for transmission to the host computer via the first communication network (inherent in col. 32, lines 46-54).
- 21. As to claim 20, Cunningham discloses receiving a request, via the first communication network, from the host computer for information related to one of the plurality of remote devices, providing a command message to the second communication network for delivery to the one of the plurality of remote devices based on one of the communication paths associated with the communication device corresponding to the one of the plurality of remote devices (col. 32, lines 15-24; col. 44, lines 14-35, 54-64); and col.45, lines 54-59).
- 22. As to claim 22, Cunningham discloses providing the data signal to the first communication network for delivery to the host computer (118, 120, and 122 of Fig. 1).

Art Unit: 2154

- 23. Claims 5, 9, 13, 14,18, 19, and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham or Cunningham and Canada as applied to claims 1-4, 6-8, 10-12, 15-17, and 20-25 in view of Johnson et al. (US 5,673,252), hereafter "Johnson".
- 24. Johnson is cited by the examiner in a previous office action.
- 25. As to claims 5, 9, 18, 19, and 26, Cunningham discloses the first communication protocol comprises a data packet, the data packet comprising: a from address, and a command number comprising a function code, a data field, a checksum field; and a packet number field (col. 14, lines 13-54; and Fig. 21). Cunningham, however, does not discloses other fields in the packet, such as a to address, a packet length field; a packet maximum field, and a message number field. Johnson, on the other hand, discloses a message packet that includes these fields (e.g. Fig. 3). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham or Cunningham and Canada with the teachings of Johnson because Johnson's extended packet fields would increase the communication efficiency in Cunningham's system by allowing for broadcast messages and avoiding network congestion.
- 26. As to claims 13 and 14, Cunningham does not disclose a second communication identifier associated with an intermediate communication device. Johnson, on the other hand, discloses a second communication identifier associated with an intermediate communication device(e.g. the to address field, Fig. 3). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham and Johnson because Johnson's

Page 10

Application/Control Number: 09/925,786

Art Unit: 2154

extended packet fields would increase the communication efficiency in Cunningham's system by allowing for broadcast messages and avoiding network congestion.

- 27. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham or Cunningham and Canada as applied to claims 1-4, 6-8, 10-12, 15-17, and 20-25, and further in view of Shaughnessy et al. (US 6,141,347), hereafter "Shaughnessy".
- 28. Shaughnessy is cited by the examiner in a previous office action.
- 29. As to claim 7, and 27, Cunningham and Canada does not necessarily disclose receiving initialization commands from the plurality of communication devices. Shaughnessy, on the other hand, discloses receiving initialization commands from the plurality of communication devices (col. 5, lines 15-32; and Fig. 5). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham or Cunningham and Canada with the teachings of Shaughnessy because Shaughnessy 's receiving initialization commands from the plurality of communication devices would assist in configuring look-up tables for message communication between devices in Cunningham's system.
- 30. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.
- 31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 4:00.

Art Unit: 2154

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 11, 2005

Nabil El-Hady, Ph.D., M.B.A. Primary Patent Examiner Art Unit 2154